

CLAIMS

1. A record medium for recording a plurality of types of management information provided corresponding to a plurality of types of record mediums along with data of a content.
2. The record medium as set forth in claim 2, wherein the plurality of types of additional information are embedded as additional information to the data of the content.
3. The record medium as set forth in claim 2, wherein the additional information is spectrum-spread and superimposed to the data of the content.
4. The record medium as set forth in claim 2, wherein the additional information is inserted into a low order bit of the data of the content.
5. The record medium as set forth in claim 2, wherein the additional information is inserted into a high order coefficient of which the data of the content has been compressed.
6. The record medium as set forth in claim 2, wherein the additional information is inserted into the data of the content using masking effect so that the additional information does not adversely affect the data of the content.
7. The record medium as set forth in claim 2,

wherein the additional information is inserted into a first peak or a second peak in a predetermined range of the data of the content, or in the vicinity of the first peak or the second peak.

5 8. The record medium as set forth in claim 2,
 wherein the additional information contains
 at least sync data, original medium type representation
 identification information, copy condition
 representation information, and generation management
10 information.

10 9. The record medium as set forth in claim 1,
 wherein the record medium has a data record
 area to which the data of the content is recorded, the
 plurality of types of management information being
15 recorded to the data area.

10 10. The record medium as set forth in claim 1,
 wherein the plurality of types of management
 information is recorded to an area designated for sub
 code data in the data record area.

20 11. The record medium as set forth in claim 9,
 wherein the plurality of types of management
 information is recorded to an area designated for
 header data in the data record area.

25 12. The record medium as set forth in claim 9,
 further comprising:

 a lead-in area that is read before the data
 record area, the plurality of types of management

information being recorded to the lead-in area.

13. The record medium as set forth in claim 9,
further comprising:

an area to which index data is recorded, the
5 area being read before the data record area, the
plurality of types of management information being
recorded to the area to which the index data is
recorded.

14. The record medium as set forth in claim 1,
10 wherein the plurality of types of management
information are first management information for
reproduction-only record mediums and second management
information for recordable record mediums.

15. The record medium as set forth in claim 14,
15 wherein the first management information and
the second management information are information that
contains at least one of copy management information,
charging management information, and reproduction
management information.

20 16. The record medium as set forth in claim 15,
wherein the copy management information is
information for controlling a recording operation
and/or a reproducing operation for data of a content
that is read from the record medium corresponding to
25 the type thereof.

17. The record medium as set forth in claim 1,
wherein the plurality of types of management

information is provided corresponding to types of the record mediums that are an original record medium and a non-original record medium.

18. A recording method for a record medium,
5 comprising the steps of:

embedding a plurality of types of management information provided corresponding to a plurality of types of record mediums as additional information to data of a content that is recorded;

10 performing a first encoding process for the data of the content to which the additional information has been embedded;

performing a second encoding process for the plurality of types of management information; and

15 modulating the data of the content of which the first encode process has been performed and the plurality of types of management information of which the second encode process has been performed.

19. A recording method for a record medium,
20 comprising the steps of:

determining the type of a record medium to which a plurality of types of management information provided corresponding to a plurality of types of record mediums have been recorded along with data of a
25 content; and

controlling a recording operation for the data of the content that has been read from the record

medium corresponding to the management information selected corresponding to the determined result of the record medium in the plurality of types of management information.

5 20. The recording method for the record medium as set forth in claim 19,

10 wherein the plurality of types of management information contains first management information for reproduction-only record mediums and second management information for recordable record mediums, and

15 wherein the controlling step is performed by controlling the recording operation corresponding to the first management information when the determined result at the determining step represents that the record medium is a reproduction-only record medium and by controlling the recording operation corresponding to the second management information when the determined result at the determining step represents that the record medium is a recordable record medium.

20 21. The recording method for the record medium as set forth in claim 20,

25 wherein the controlling step is performed by prohibiting the recording operation for the data of the content that is read from the record medium when the determined result at the determining step represents that the record medium is a reproduction-only record medium and the second management information prohibits

the recording operation of the data or the content that is read from the record medium.

22. The recording method for the record medium as set forth in claim 20, further comprising the step of:

5 when the data of the content that is read from the record medium as a copy source is recorded to another record medium as a copy destination, recording the plurality of types of management information to the other record medium as the copy destination along with the data of the content that is read from the record medium as the copy source.

23. The recording method for the record medium as set forth in claim 22,

15 wherein the management information contains at least one of information that represents a generation and information that represents a condition in which the data of the content that is read from the record medium as the copy source is recorded to the other record medium as the copy destination.

20 24. The recording method for the record medium as set forth in claim 22,

25 wherein when the data of the content that is read from the other medium as a copy source is recorded to a further record medium as a copy destination, the controlling step is performed by controlling the recording operation for the data of the content that is read from the other record medium as the copy source

corresponding to the second management information.

25. The recording method for the record medium as set forth in claim 24,

5 wherein the controlling step is performed by prohibiting the data of the content that is read from the other record medium from being recorded.

26. The recording method for the record medium as set forth in claim 19,

10 wherein the determined Result at the determining step represents that the record medium is a recordable record medium and the second management information permits the recording operation for the data of the content that is read from the record medium, the controlling step is performed by performing the
15 recording operation for the data of the content that is read from the record medium as the copy source corresponding to the second management information and rewriting the second management information so that it prohibits a further recording operation for the data of
20 the content.

27. An output controlling method, comprising the steps of:

25 reading data of a content and a plurality of types of management information from a record medium, the plurality of types of management information provided corresponding to a plurality of types of record mediums being embedded to the data of the

content, the plurality of types of management information being recoded in a predetermined area of the record medium;

5 extracting the plurality of types of management information from the data of the content that is read from the record medium;

10 collating the plurality of types of management information that are extracted with the plurality of types of management information that are read from the record medium; and

controlling an output of the data of the content that is read corresponding to the collated result.

15 28. The output controlling method as set forth in claim 27,

20 wherein when the plurality of management information that are extracted do not match the plurality of types of management information that are read from the record medium, the controlling step is performed by not permitting the data of the content that is read from the record medium to be output.

29. The output controlling method as set forth in claim 28,

25 wherein when the plurality of types of management information that are extracted match the plurality of types of management information that are read from the record medium, the controlling step is

performed by controlling the output of the data of the content that is read from the record medium corresponding to the plurality of types of management information that are read from the record medium.

5 30. The output controlling method as set forth in claim 29, further comprising the step of:

10 determining the type of the record medium,
wherein the controlling step is performed by controlling the output of the data of the content that is read corresponding to a management condition selected corresponding to the determined result of the record medium from the plurality of types of management information.

15 31. A reproducing apparatus for a record medium, comprising:

20 a reading portion for reading data of a content and a plurality of types of management information from the record medium, the plurality of types of management information provided corresponding to a plurality of types of record mediums being embedded to the data of the content, the plurality of types of management information being recoded in a predetermined area of the record medium;

25 an extracting portion for extracting the plurality of types of management information from the data of the content that is read from the record medium by said reading portion;

a collating portion for collating the plurality of types of management information that are extracted by said extracting portion with the plurality of types of management information that are read from the record medium by said reading portion; and

an output controlling portion for controlling an output of the data of the content that is read corresponding to the collated result by the collating portion.

32. The reproducing apparatus for the record medium as set forth in claim 31,

wherein when the plurality of management information that are extracted by said extracting portion do not match the plurality of types of management information that are read from the record medium by said reading portion, said output controlling portion does not permit the data of the content that is read from the record medium to be output.

33. The reproducing apparatus for the record medium as set forth in claim 32,

wherein said output controlling portion has a switch circuit portion, and

wherein when the collated result of said collating portion represents that the plurality of types of management information extracted by said extracting portion do not match the plurality of types of management information that are read from the record

medium by said reading portion, said switch circuit portion is opened.

34. The reproducing apparatus for the record medium as set forth in claim 33,

5 wherein when the collated result of said collating portion represents that the plurality of types of management information extracted by said extracting portion match the plurality of types of management information that are read from the record medium by said reading portion, said switch circuit portion is closed and thereby the data of the content that is read from the record medium corresponding to the plurality of types of management information that are read from the record medium is output through said switch circuit portion.

15 35. The reproducing apparatus for the record medium as set forth in claim 31, further comprising:

20 a determining portion for determining the type of the record medium corresponding to a signal that is read from the record medium by said reading portion,

25 wherein one of the plurality of types of management information that are read from the record medium by said reading portion is selected corresponding to the determined result of said determining portion,

wherein one of the plurality of types of

management information extracted by said extracting portion is selected, and

wherein the selected management information is supplied to said collating portion.

5 36. The reproducing apparatus for the record medium as set forth in claim 35,

wherein said output controlling portion has:

10 a second determining portion for determining a selected management condition corresponding to the determined result of said determining portion; and

15 a switch circuit portion for controlling the output of the data of the content that is read from the record medium, the open state and close state of said switch circuit portion being controlled by an output of said second determining portion.

37. The reproducing apparatus for the record medium as set forth in claim 31,

wherein said reading portion has:

20 a head portion for reading the data of the content and the plurality of types of management information from the record medium;

a demodulating portion for decoding an output signal of said head portion;

25 a second extracting portion for extracting the plurality of types of management information from output data of said demodulating portion; and

an error correction processing portion for

performing an error correcting process for output data of said demodulating portion and supplying the resultant output data to said second extracting portion.

38. A record and reproduction controlling method for a record medium, comprising the steps of:

reading data of a content and a plurality of types of management information from a record medium, the plurality of types of management information provided corresponding to a plurality of types of record mediums being embedded as additional information to the data of the content, the plurality of types of management information being recoded in a predetermined area of the record medium;

extracting the additional information from the data of the content that is read from the record medium;

collating the plurality of types of management information that are contained in the extracted additional information with the plurality of types of management information that are read from the record medium; and

controlling an output of the data of the content that is read corresponding to the collated result.

39. The record and reproduction controlling method for the record medium as set forth in claim 38, wherein when the plurality of management

information that are contained in the extracted
additional information do not match the plurality of
types of management information that are read from the
record medium, the controlling step is performed by not
5 permitting the data of the content that is read from
the record medium to be output.

40. The record and reproduction controlling
method for the record medium as set forth in claim 39,

wherein when the plurality of types of
10 management information that are contained in the
extracted additional information match the plurality of
types of management information that are read from the
record medium, the controlling step is performed by
controlling the output of the data of the content that
15 is read from the record medium corresponding to the
plurality of types of management information that are
read from the record medium.

41. The record and reproduction controlling
method for the record medium as set forth in claim 40,
20 further comprising the step of:

determining the type of the record medium,

wherein the controlling step is performed by
controlling the output of the data of the content that
is read corresponding to a management condition
25 selected corresponding to the determined result of the
type of the record medium from the plurality of types
of management information.

42. The record and reproduction controlling method as set forth in claim 41,

wherein when the data of the content that is read corresponding to the selected management information is recorded to another record medium, the controlling step is performed by recording the data of the content that is read from the record medium and the plurality of types of management information to the other record medium.

43. A reproducing method for a record medium, comprising the steps of:

determining the type of the record medium, data of a content and at least reproduction management information for reproduction-only record mediums and reproduction management information for recordable record mediums being recorded to the record medium; and

controlling a reproducing operation corresponding to the management information selected corresponding to the determined result of the type of the record medium from the plurality of types of management information.

44. The reproducing method for the record medium as set forth in claim 43,

wherein the controlling step is performed by switching a charging process for the data of the content that is reproduced corresponding to the selected management information.

45. A recording method, comprising the steps of:
determining the type of a record medium, a
plurality of types of management information provided
corresponding to types of record mediums being recorded
to the record medium along with data of a content, the
plurality of types of management information containing
copy management information;

determining whether or not the record medium
is an original record medium corresponding to the
management information that is read from the record
medium and the determined result of the type of the
record medium at the first determining step; and

when the determined result at the first
determining step represents that the record medium is
an original record medium, controlling a recording
operation for the data of the content that is read from
the record medium to another record medium
corresponding to the copy management information.

46. The recording method as set forth in claim 45,
when the management information that is read
from the record medium matches the determined result of
the type of the record medium at the first determining
step, the determined result at the second determining
step represents that the record medium is an original
record medium.

47. The recording method as set forth in claim 45,
further comprising the steps of:

when the determined result at the second
determining step represents that the record medium is
not an original record medium, determining whether or
not the copy management information is copy management
5 information that permits a copy operation to be
performed in one generation; and

when the copy management information is copy
management information that permits a copy operation to
be performed in one generation, advancing the
10 generation of the copy management information by one,

wherein the controlling step is performed by
controlling the recording operation corresponding to
the copy management information of which the generation
has been advanced by one.

48. The recording method as set forth in claim 47,
15 wherein the controlling step is performed by
prohibiting the recording operation corresponding to
the copy management information of which the generation
has been advanced by one.

49. The recording method as set forth in claim 47,
20 wherein when the copy management information
is not copy management information that permits a copy
operation to be performed in one generation, the
controlling step is performed by controlling the
25 recording operation corresponding to the copy
management information.

50. The recording method as set forth in claim 45,

further comprising the step of:

when the determined result at the second determining step represents that the record medium is not an original record medium, determining whether or not the copy management information is copy management information that permits a copy operation to be performed in one generation; and

when the copy management information is copy management information that permits the copy operation to be performed in one generation, rewriting the copy management information so that it prohibits a copy operation,

wherein the controlling step is performed by controlling the recording operation corresponding to the rewritten copy management information.

51. A recording method, comprising the steps of:

determining the type of a record medium, a plurality of types of management information provided corresponding to a plurality of types of record mediums being recorded on the record medium, the plurality of types of management information containing identification information, copy generation information, and copy management information;

determining whether or not the record medium is an original record mediums corresponding to the management information that is read from the record medium and the determined result of the type of the

record medium at the first determining step; and

when the determined result at the second
determining step represents that the record medium is
an original record medium, advancing the generation of
the copy generation information by one and controlling
a recording operation for recording the data of the
content that is read the record medium to another
record medium corresponding to the copy management
information.

52. The recording method as set forth in claim 51,
wherein the controlling step is performed by
controlling the recording operation for the data of the
content that is read from the record medium and the
management information that contains the copy
generation information of which the generation has been
advanced by one corresponding to the copy management
information.

53. The recording method as set forth in claim 52,
wherein the second determining step is
performed by determining whether or not the record
medium is an original record medium corresponding to
the determined result of the record medium at the first
determining step, the identification information, and
the copy generation information.

54. The recording method as set forth in claim 52,
wherein when the determined result at the
second determining step represents that the record

medium is not an original record medium, the
controlling step is performed by advancing the
generation of the copy generation information by one,

5 wherein when the data of the content that is
read from the record medium is recorded to the other
record medium, the controlling step is performed by
further advancing the generation of the copy generation
information by one and performing the recording
operation for recording the resultant copy generation
10 information to the other record medium along with the
data of the content that is read from the record medium.

55. The recording method as set forth in claim 51,

wherein the management information further
contains charging information, and

15 wherein when the data of the content that is
read from the record medium is recorded to the other
record medium corresponding to the copy management
information, the controlling step is performed by
performing a charging process corresponding to the
20 charging information.

56. A reproducing method, comprising the steps
of:

determining the type of a record medium, a
plurality of types of management information provided
25 corresponding to a plurality of types of record mediums
being recorded to the record medium along with data of
a content;

determining whether or not the record medium
is an original record medium corresponding to the
management information that is read from the record
medium and the determined result of the type of the
5 record medium at the first determining step; and

when the determined result at the second
determining step represents that the record medium is
an original record medium, performing a reproducing
operation for the record medium corresponding to the
management information.

10 57. The reproducing method as set forth in claim
56, further comprising the step of:

when the determined result at the second
determining step represents that the record medium is
15 not an original record medium, prohibiting the record
medium from being reproduced.

58. The reproducing method as set forth in claim
57,

wherein the management information contains
20 copy generation information, and

wherein the reproducing method further
comprises the step of:

when the determined result at the second
determining step represents that the record medium is
25 not an original record medium, advancing the generation
of the copy generation information by one.

59. The reproducing method as set forth in claim

51,

wherein the management information further
contains charging information, and

wherein the reproducing method further
comprises the step of:

when the data of the content that is read
from the record medium is reproduced corresponding to
the charging information, performing a charging process
corresponding to the charging information.

60. A recording and reproducing method,
comprising the steps of:

determining the type of a record medium, a
plurality of types of management information provided
corresponding to a plurality of types of record mediums
being recorded on the record medium, the plurality of
types of management information containing copy
generation information and copy management information;

determining whether or not the record medium
is an original record mediums corresponding to the
management information that is read from the record
medium and the determined result of the type of the
record medium at the first determining step;

when the determined result at the second
determining step represents that the record medium is
an original record medium, reproducing the record
medium corresponding to the management information; and
advancing the generation of the copy

generation information by one and controlling a
recording operation for recording the data of the
content that is read from the record medium to another
record medium corresponding to the copy management
information.

61. The recording and reproducing method as set
forth in claim 60,

wherein the controlling step is performed by
controlling the recording operation for the data of the
content that is read from the record medium and the
management information that contains the copy
generation information of which the generation has been
advanced by one corresponding to the copy management
information.

62. The recording and reproducing method as set
forth in claim 61,

wherein the second determining step is
performed by determining whether or not the record
medium is an original record medium corresponding to
the determined result of the record medium at the first
determining step, the identification information, and
the copy generation information.

63. The recording and reproducing method as set
forth in claim 60, further comprising the step of:

wherein when the determined result at the
second determining step represents that the record
medium is not an original record medium, prohibiting

the record medium from being reproduced.

64. The recording and reproducing method as set forth in claim 60,

wherein when the determined result at the
5 second determining step represents that the record
medium is not an original record medium, the
controlling step is performed by advancing the
generation of the copy generation information by one
and controlling the reproducing operation for the
10 record medium corresponding to the management
information,

wherein when the data of the content that is
read from the record medium is recorded to the other
record medium, the controlling step is performed by
15 further advancing the generation of the copy generation
information by one and controlling the recording
operation for recording the data of the content that is
read from the record medium to the other record medium
corresponding to the management information.

20 65. A recording method, comprising the steps of:

identifying the type of a record medium, the
record medium having an identification portion used to
identify the type of the record medium, at least first
management information for reproduction-only record
25 medium and second management information for recordable
record mediums being recorded to the record medium
along with data of a content; and

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controlling a recording operation for
recording the data of the content that is read from the
record medium along with the first management
information and the second management information to
5 another record medium corresponding to the first
management information, when the determined result of
the type of the record medium at the determining step
represents that the record medium is a reproduction-
only record medium, and a recording operation for
10 recoding the data of the content that is read from the
record medium along with the first management
information and the second management information to
the other record medium corresponding to the second
management information, when the determined result of
15 the type of the record medium at the determining step
represents that the record medium is a recordable
record medium.

66. The recording method as set forth in claim 65,
wherein when the data of the content that is
20 read from the record medium is recorded to the other
record medium corresponding to the second management
information, the controlling step is performed by
rewriting the second management information so that it
prohibit the recording operation.

25 67. The recording method as set forth in claim 66,
wherein when the data of the content that is
read from the record medium is recorded to the other

record medium corresponding to the first management information, the controlling step is performed by not rewriting the first management information and the second management information.

5 68. The recording method as set forth in claim 64,

wherein the first management information and the second management information are embedded to the data of the content and recorded to the record medium, the first management information and the second management information being recorded in a predetermined area of the record medium, and

10 wherein the recording method further comprises the step of:

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15 collating the management information selected corresponding to the type of the record medium from the first management information and the second management information extracted from the data of the content that is read from the record medium with the management information selected corresponding to the determined result of the type of the record medium from the first management information and the second management information that are read from the predetermined area of the record medium, and

20 wherein when the first management information or the second management information that is extracted from the data of the content matches the first management information or the second management

information that is read from the record medium, the controlling step is performed by permitting the data of the content that is read from the record medium to be output to the other record medium.

5 69. The recording method as set forth in claim 68,

wherein when the first management information or the second management information that is extracted from the data of the content does not match the first management information or the second management information that is read from the record medium, the controlling step is performed by prohibiting the data of the content that is read from the record medium from being output to the other record medium.

10 70. The recording method as set forth in claim 68,

15 wherein when the first management information or the second management information that is extracted from the data of the content matches the first management information or the second management information that is read from the record medium and
20 when the management information selected from the first management information and the second management information corresponding to the identified result of the record medium permits the data of the content that is read from the record medium to be recorded, the
25 controlling step is performed by permitting the data of the content that is read from the record medium to be output.

71. A recording and/or reproducing method,
comprising the steps of:

determining the type of a record medium, the
record medium having an identification portion used to
identify the type thereof, management information
containing at least identification information, copy
generation information, and copy management information
being recoded to the record medium along with data of a
content;

determining whether or not the record medium
is an original record medium corresponding to the
identified result of the record medium and at least the
identification information and the copy generation
information that are read from the record medium; and

controlling a recording operation and/or a
reproducing operation for the record medium
corresponding to the determined result at the second
determining step.

72. The recording and/or reproducing method as
set forth in claim 71,

wherein when the determined result at the
second determining step represents that the record
medium is an original record medium, the controlling
step is performed by controlling the reproducing
operation for the record medium corresponding to the
management information.

73. The recording and/or reproducing method as

set forth in claim 71,

wherein when the determined result at the second determining step represents that the record medium is an original record medium, the controlling step is performed by recording the data of the content that is read from the record medium to another record medium corresponding to the copy management information and the copy generation information, advancing the generation of the copy generation information by one, and recording the data of the content and the resultant copy generation information to the other record medium.

74. The recording and/or reproducing method as set forth in claim 71,

wherein when the determined result at the second determining step represents that the record medium is not an original record medium, the controlling step is performed by advancing the generation of the copy generation information that is read from the record medium by one generation.

75. The recording and/or reproducing method as set forth in claim 74,

wherein the controlling step is performed by controlling the reproducing operation for the record medium corresponding to the management information.

76. The recording and/or reproducing method as set forth in claim 74,

wherein the controlling step is performed by

recording the data of the content that is read from the record medium to the other record medium corresponding to the copy management information and the copy generation information, advancing the generation of the copy generation information by one, and recoding the data of the content and the resultant copy generation information to the other record medium.

77. The recording and/or reproducing method as set forth in claim 71,

when the determined result at the second determining step represents that the record medium is an original record medium, the controlling step is performed by prohibiting the record medium from being reproduced.

78. Content data of which a plurality of types of management information provided corresponding to a plurality of types of record mediums are embedded as additional information to data.

79. The content data as set forth in claim 78, wherein the additional information is spectrum-spread and superimposed to the data.

80. The content data as set forth in claim 78, wherein the additional information is inserted into a low order bit of the data.

81. The content data as set forth in claim 78, wherein the additional information is inserted into a high order coefficient of which the

data has been compressed.

82. The content data as set forth in claim 78,
wherein the additional information is
inserted into the data using masking effect so that the
additional information does not adversely affect the
data.

83. The content data as set forth in claim 78,
wherein the additional information is
inserted into a first peak or a second peak in a
predetermined range of the data, or in the vicinity of
the first peak or the second peak.

84. The content data as set forth in claim 78,
wherein the plurality of types of management
information are first management information for
reproduction-only record mediums and second management
information for recordable record mediums.

85. The content data as set forth in claim 79,
wherein the first management information and
the second management information are information that
contains at least one of copy management information,
charging management information, and reproduction
management information.

86. The content data as set forth in claim 78,
wherein the additional information contains
at least sync data, original medium type representation
identification information, copy condition
representation information, and generation management

information.

87. The content data as set forth in claim 86,
wherein the generation management information
is written a plurality of times.

5 88. The content data as set forth in claim 87,
wherein error detection code is added to the
additional information, the generation management
information being excluded from an error detection
block of the error detection code.

10 89. A record medium having an identification
portion used to identify the type thereof, data of a
content being recorded to the record medium, a
plurality of management information provided
corresponding to a plurality of types of record mediums
15 being embedded as additional information to the data of
the content, the plurality of types of management
information being recorded in a predetermined area of
the record medium.

20 90. The record medium as set forth in claim 89,
wherein the additional information is
inserted into a low order bit of the data.

91. The record medium as set forth in claim 89,
wherein the additional information is
inserted into a high order coefficient of which the
25 data has been compressed.

92. The record medium as set forth in claim 89,
wherein the additional information is

inserted into the data using masking effect so that the additional information does not adversely affect the data.

93. The record medium as set forth in claim 89,
5 wherein the additional information is inserted into a first peak or a second peak in a predetermined range of the data, or in the vicinity of the first peak or the second peak.

94. The record medium as set forth in claim 89,
10 wherein the additional information is spectrum-spread and superimposed to the data of the content.

95. The record medium as set forth in claim 89,
15 wherein the plurality of types of management information are first management information for reproduction-only record mediums and second management information for recordable record mediums.

96. The record medium as set forth in claim 95,
20 wherein the first management information and the second management information are information that contains at least one of copy management information, charging management information, and reproduction management information.